Apple II
Technical Notes

Developer Technical Support

Apple IIGS
#89: MessageByName—Catchy Messages

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This note clarifies `MessageByName` and provides examples of creating and retrieving a named message.

Did You Say You Want To Get A Message?

All you have to do is ask. *Apple IIGS Toolbox Reference*, Volume 3 already tells you how. Here's what the fine print says: with the `createItFlag` set to `FALSE` and the name of the message you are after in the `nameString`, you call `MessageByName`. What's unclear in the manual is that if the message was found, no error is returned, the `createFlag` is returned as `FALSE`, and `messageID` contains the ID you can pass to `MessageCenter` to retrieve the contents of the message. Here's an example of `MessageByName` in use.

The following code **creates** a named message.

```
CreateNamedMessage
            pha
            pha
            pea 1                                   ;create it
            pushlong #MsgBlock
            _MessageByName                          ;function $1701
            pla
            sta myMsgID                             ;keep the ID if you want
            pla                                     ;check the createFlag if you
want
            ...

MsgBlock    dc.w MsgBlockEnd-MsgBlock
            dc.b 28,'XYZ Software:My Cool Product'  ;Pascal-style string
            ... more data goes here
MsgBlockEnd
```

The following code **retrieves** the message.

```
            pha
            pha
            pea 0                                   ;don't create message
            pushlong #MsgBlock
            _MessageByName                          ;function $1701
            ply                                     ;keep id of existing message
            pla                                     ;createFlag (ignore)
            bcs noMessage                           ;carry set if an error occurred
```

```
            pea 2                                   ;MessageCenter action: GET
             phy                                        ;message ID for MessageCenter,
below
            pha
            pha                                     ;space for NewHandle result
            lda #0                                  ;size of handle (0)
            pha
            pha
            ldx MyID                                ;ID for empty
            phx
            pha                                     ;handle attributes (0)
            pha
            pha                                     ;no special location
            _NewHandle
            lda 3,s
            sta mcHandle+2
            lda 1,s
             sta mcHandle                               ;keep a copy of the handle for
later
              _MessageCenter                                ;takes Action, Msg ID, and
Handle

            lda mcHandle+2
            pha
            lda mcHandle
            pha
            phd
            tsc
            tcd
            ldy #2
            lda [3],y
            tax
            lda [3]
            sta 3
            stx 5

* now read data from the message at [3]
            ldy #$xxxx                              ;index past the name string
            lda [3],y
            ...
            pld
            pla
            pla

            lda mcHandle+2
            pha
            lda mcHandle
            pha
            _DisposeHandle

noMessage   ...

mcHandle    dc.l 0
myMsgID     dc.w 0
```

`MessageByName` is available in Tool Locator versions 3.0 and later (System Software 5.0 and later).

Further Reference

- *Apple IIGS Toolbox Reference, Volumes 2-3*